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A FIXED POINT APPROACH TO GENERALIZED HYERS- ULAM STABILITY OF QUADRATIC FUNCTIONAL EQUATION IN MATRIX NORMED SPACES

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Abstract

In this paper, we obtain the general solution of a new quadratic functional equation

$$f(2x + y) + f(2x - y) + f(x + y) + f(x - y) = 10f(x) + 4f(y)$$

in matrix normed spaces. Also we investigate its Hyers-Ulam stability using fixed point method.

1. Introduction

The stability problem of functional equation originated from a question of

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